PP-037 Infective endocarditis due to *Burkholderia cepacia* in a patient with a permanent pacemaker

M.K. Pasayan[1]*, K. Cosca[1], G. Domingo[1,2], M. Saniel[1,2]. [1]*Dept. of Medicine, The Medical City, Pasig, Philippines*, [2]*University of the Philippines College of Medicine, Manila, Philippines*

Introduction: Infections of implanted pacemakers (PM), including infective endocarditis (IE), are increasingly reported and pose a therapeutic challenge. *Burkholderia cepacia*, a common respiratory pathogen in patients with cystic fibrosis and chronic granulomatous disease, is a rare cause of IE and carries a high mortality rate because of its intrinsic drug resistance. We present the first reported case of a blood culture-negative permanent PM lead infective endocarditis due to *B. cepacia* successfully treated with PM explantation and combination antibiotic regimen.
Case description: A 62-year-old female underwent permanent single-chamber PM implantation for AV block Mobitz type II. Pocket site discharge, first noted 2 weeks later, persisted despite oral antibiotics and debridement. She was re-admitted after 8 weeks with a completely dehisced PM pocket wound. Percutaneous explantation of the device with pocket debridement was done. Site discharge, tissue and PM lead cultures all grew *B. cepacia*, susceptible to trimethoprim–sulfamethoxazole (MIC 0.25 ug/ml) and ceftazidime (MIC 3ug/ml). Blood cultures were repeatedly negative. Transesophageal echocardiogram (TEE) revealed vegetations at the entrance of the superior vena cava extending proximally to the right atrium. Cure was achieved after 6 weeks of IV ceftazidime (2 g 8-hourly) and oral TMP-SMX (320/1600 mg 8-hourly) before the reimplantation of a new device at a different site.
The successful clinical outcome of this case reinforces the use of evidence-based strategies in the management of complicated PM infections.

PP-038 Comparison of the virulence factors of *Helicobacter pylori* isolated in stomach and saliva in Iran

N. Souod[1,2]*, H. Momtaz[3], M. Momeni[3], G. Ramezani[4]. [1]*Young Researchers Club*, [2]*Department of Microbiology, Islamic Azad University, Jahrom Branch, Jahrom, Iran*, [3]*Department of Microbiology, Islamic Azad University, Shahrekord Branch, Shahrekord, Iran*, [4]*Endoscopy center, Hagar hospital, Shahrekord, Iran*

Objectives: *Helicobacter pylori* is a microaerophilic, spiral-shaped motile bacterium that is strongly associated with gastroduodenal diseases, but recently dental plaque and saliva have been implicated as possible sources of *H. pylori* infection. Two virulence factors that are expressed by the alleles of the cytotoxin genes, *cagA* and *vacA*, have been identified. The aim of this study was to compare *cagA* and *vacA* genotypes of *H. pylori* between stomach and saliva in a same patient.
Methods: This study was performed on antral gastric biopsy specimens and saliva samples which were obtained from 250 patients undergoing upper gastrointestinal tract endoscopy in Hagar Hospital of Shahrekord Township in Iran. Initially, *H. pylori* strains were identified by rapid urease test; then we applied PCR assay to analyze *cagA* and twelve *vacA* genotypes of *H. pylori* from both gastric and saliva specimens.
Results: One hundred and eighty-nine (75.6%) and 36 (14.4%) samples were *H. pylori* positive in gastric and saliva samples, respectively. Evaluation of virulence factors in the 36 patients whose saliva and gastric samples were both positive for *H. pylori* showed a great deal of cytotoxin genotypic diversity between stomach and saliva in the same patient; in fact 14 (38.8%) patients had different *H. pylori* strains in their saliva and gastric samples.
Conclusion: The data suggest that more than 1 *H. pylori* strain may exist in stomach and saliva in the same patient.
Acknowledgment: We thank Mr. S. Ghorbani, Mr. M. Sarshar and Dr. A. Sharifzadeh and Dr. E. Tajbakhsh for their cooperation.

PP-039 Flesh-eating disease

P. Kaushik[1]*, S. Amirishetty[1], J. Matta[1]. [1]*Mount Sinai School of Medicine, Jersey City, USA*

Introduction: Necrotizing fasciitis (NF), also known as flesh-eating disease is a rare and rapidly progressive infection of skin, fascia and subcutaneous tissue with a fatality rate of approximately 24%. Marjolin's ulcer is an aggressive squamous cell carcinoma that arises from either a burn scar or a chronic non-healing ulcer. The portal of entry in necrotizing fasciitis is through skin following trauma or surgery. We describe a case of necrotizing fasciitis developing in the vicinity of Marjolin's ulcer where the portal of entry of infection is presumably through the malignant ulcer.
Case Description: A 59 year old Caucasian female with a history of chronic non-healing ulcer overlying the lateral malleolus of her left leg for ten years presented with redness and swelling of left lower extremity for three days. She also complained of fever, nausea and vomiting. On examination, the left leg was edematous, erythematous, and tender with multiple blisters and two non-tender full thickness ulcers. Patient was hypotensive, tachycardic, had elevated white blood cell count with left shift. She was admitted in Intensive Care Unit and was started on intravenous antibiotics and fluids. Left lower extremity arterial Doppler ultrasound showed moderate peripheral arterial disease. Patient was immediately taken to the Operating Room for debridement. Pathology of the debrided tissue showed extensive necrosis and inflammation of the skin and underlying tissue. Debrided wound and blood cultures, both grew *Streptococcus pyogenes*, also known as Group A Streptococcus (GAS). Microscopic evaluation of the larger ulcer revealed moderately differentiated squamous cell carcinoma. The diagnosis of necrotizing fasciitis complicating marjolin's ulcer was made. After the surgical debridement was done and antibiotics were started, she improved transiently but the hospital course was complicated by deep vein thrombosis, pulmonary embolism and *Clostridium difficile* colitis and the patient died two weeks later.

PP-040 Real-time PCR assay for identification of *Brucella abortus* in bulk milk samples in Iran

S. Moshkelani[1]*, M. Javaheri Koupaei[1], S. Rabiei[1], A. Doosti[1]. [1]*Biotechnology Research Center, Islamic Azad University, Shahrekord Branch, Iran*

Background: Brucellosis is a bacterial zoonosis of worldwide importance, and of major public health and economic significance. The importance of this infection disease is not only to the economic losses in the animal production, but also to risk to human health. Culture is considered as the reference standard assay for diagnosis of *Brucella* spp. in humans and animals but it is time-consuming and hazardous. In this study, we used Real-time PCR assay as a rapid method for identification of *Brucella abortus* in bulk milk samples from dairy bovine herds in Isfahan province, Iran.
Methods: In this study, 267 bulk milk samples from 79 dairy bovine herds were collected and Purified DNA was analyzed with TaqMan system for identification of *B. abortus*.